

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The claimed invention is drawn to the following:

18. (Previously presented) A positive photosensitive resin composition comprising:
- (a) alkaline aqueous solution-soluble polyamide having a polyoxazole precursor structure;
 - (b) an o-quinonediazide compound; and
 - (c) a latent acid generator which generates acid upon heating,
wherein said component (c) is selected from the group consisting of:
 - (c-1) imide sulfonate;
 - (c-2) a compound having a structure $R^1R^2C=N-O-SO_2-R$, wherein R is selected from a group consisting of an aryl group, an alkyl group and a perfluoroalkyl group; R^1 is a cyano group; and R^2 is selected from a group consisting of a methoxyphenyl group and a phenyl group;
 - (c-3) a compound having a structure $-HN-SO_2-R'$, wherein R' is selected from a group consisting of an alkyl group, an aryl group and a perfluoroalkyl group;
 - (c-4) a salt formed from a strong acid and a base selected from a group consisting of alkyl pyridine, pyridine, N-alkyl pyridine and halogenated N-alkyl pyridine, said salt being other than onium salts; and
combinations thereof.

20. (Previously presented) A method for forming a pattern comprising the steps of:

applying a positive photosensitive resin composition onto a supporting substrate and drying the composition to obtain a photosensitive resin film;

exposing the photosensitive resin film to a ray of active light having a predetermined pattern;

developing the exposed photosensitive resin film using an alkaline aqueous solution; and

subjecting the developed photosensitive resin film to a heating treatment, wherein said positive photosensitive resin composition comprises:

(a) alkaline aqueous solution-soluble polyamide having a polyoxazole precursor structure;

(b) an o-quinonediazide compound; and

(c) a latent acid generator which generates acid upon heating, said generator having a decomposition starting temperature of 140 to 250°C; and

wherein the heating treatment is conducted at a temperature equal to or lower than 280°C.

The claimed invention to the recited positive photosensitive resin composition comprises a polybenzoxazole, a quinone diazide compound and a second latent acid generator which generates acid upon heating as listed above. None of the references of record cited anticipate the claimed invention with the specific acid generator and quinone diazide used in combination.

Further the evidence of record overcomes any *prima facie* case of obviousness based on the comparative examples.

The claimed method as recited is also not disclosed in the prior art references of record wherein the curing step is performed at the claimed ranges for the composition as recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. NUNOMURA et al (7,150,947) is cited of interest for composition comprising polyimide precursors with acid generating compounds.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Cynthia Kelly, can be reached on (571) 272-1526

The fax phone number for the USPTO is (571) 273-8300.

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/John S. Chu/
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J.Chu
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